

## Claims

1. A device for the UV treatment of fluids flowing in a flow channel, comprising a number of cylindrical low-pressure mercury UV emitters, which are arranged in groups in the flow channel, substantially with their longitudinal axes parallel to one another, in such a way that one group comprises a plurality of emitters arranged in one plane, comprising sensor means for monitoring the operating state of the emitters, and comprising at least one unit, which is connected to the sensor means, for controlling, adjusting and/or monitoring the emitters, wherein the sensor means comprise at least one elongate sensor arrangement, which is arranged parallel to one of the groups and at a distance from the group, the sensor arrangement extending substantially transversely to the longitudinal axes of the emitters of the adjacent group, and a separate UV sensor being provided for each emitter of the group.

2. The device as claimed in Claim 1, wherein the sensor arrangement is arranged in a quartz tube.

3. The device as claimed in any one of the preceding claims, wherein the emitters are arranged in the flow channel transversely to the direction of flow.

4. The device as claimed in any one of the preceding claims, wherein the sensor arrangements are arranged in the flow channel transversely to the direction of flow.

5 5. The device as claimed in any one of the preceding claims, wherein the at least one sensor arrangement comprises a support plate, which supports the UV sensors.

10 6. The device as claimed in any one of the preceding claims, wherein the sensor arrangement is arranged between two groups and wherein the support plate of the at least one sensor arrangement supports respective UV sensors, each of which faces one group, on two mutually remote flat sides.

15 7. The device as claimed in any one of the preceding claims, wherein each UV sensor is provided with a current/voltage transformer and a digital module, and wherein the sensors of a sensor arrangement communicate with the unit via a common data bus.

20 8. The device as claimed in any one of the preceding claims, wherein at least one guide sensor, which is arranged outside the sensor means, which detects the UV radiation emitted by the UV emitters and relative to which the individual sensors may be calibrated, is provided.